# E&MJ METAL AND MINERAL MARKETS

WEEKLY MARKET INFORMATION ISSUED BY THE PUBLISHERS OF ENGINEERING AND MINING JOURNAL

Vol. 27 | NEW YORK, MARCH 15, 1956 | No. 11


## THIS WEEK IN THE MARKETS . . .

- **ODM authorizes deferral of 36,000 tons of copper to Dec. 31 from June 30.**
- **Revere Copper & Brass, independent fabricator, raises product prices to 49c.**
- **U. S. Steel raised tin mill products prices 5% for Apr. 30 to Oct. 31 period.**

### COPPER—Domestic average 47.465c f.o.b. ref'y

Sales of copper in the U. S. market were exceptionally heavy this week. The U. S. average rose about ⅔c largely because of an increase in the relative quantity of high priced copper sold. The top price here was slightly over 54½c delivered. The foreign average rose about 0.6c owing to a relative decrease in amounts sold by low price sellers. Sales were moderate (they were very heavy last week). The top foreign price was slightly under 54c on an f.a.s. N. Y. basis.

Revere Copper and Brass raised the base price of its copper products to 49c a lb effective March 14. Other independents are expected to follow. The firm indicated it had been paying an average of 49c a lb for copper. The range of the prices paid have been 46c to 54½c. The need to charge prices for fabricated products according to the higher prices it must pay for refined copper puts a company at a disadvantage relative to fabricators that can get all or most of their copper at 46c. But the demand for copper products is so great, many believe a multiple price system can be sustained. When supply conditions relative to demand reduce this spread, the spread in refined copper prices may drop to zero also—and may even be reversed.

ODM announced authorization of deferral of 36,000 tons of copper from June 30, 1956 to December 31, 1956. Of this 28,000 tons had previously been deferred. Much of the 36,000 tons is Canadian. Some factors suggest some of this will not be diverted to industry. Some producers may feel they will not be able to meet the December delivery date. Some factors say those contracts with the Government at flat prices will be diverted to industry but some of the average price material will not. Many factors doubt this though.

Copper Institute data for December 1955 and January and February 1956, follow:

**United States**

| | 1955 | 1956 | |
|---|---|---|---|
| Production: | Dec. | Jan. | Feb. |
| Crude, primary | 93,186(a) | 96,732(a) | 89,491 |
| Crude, secondary | 10,911 | 10,353(a) | 11,547 |
| Totals | 104,975 | 107,085(a) | 101,038 |
| Refined copper | 145,423 | 123,798 | 127,917 |
| Deliveries, refined | 138,803 | 130,431(a) | 139,383 |
| Stock at end, ref'd. | 61,554 | 50,016 | 47,053 |

**Outside United States**

| | | | |
|---|---|---|---|
| Production: | | | |
| Crude, primary | 120,659 | 137,165(a) | 138,918 |
| Crude, secondary | 801 | 897 | 1,808 |
| Totals | 121,460 | 137,962(a) | 140,726 |
| Refined copper | 104,926(a) | 113,502 | 115,541 |
| Deliveries, refined | 108,565(a) | 111,994 | 97,458 |
| Stock at end, ref'd. | 159,777(a) | 167,290 | 179,633 |

(a) Corrected figures.

The International Monetary Fund arranged to lend Chile $35-million. About $40-million is expected to be borrowed from private sources in order to establish a $75-million stabilization fund. The IMF was set up with the purpose of alleviating monetary problems, especially in so far as they relate to stabilizing exchange rates and reducing balance of payment difficulties. This loan may help Chile establish a single free exchange rate, a goal she recently said was a major objective.

A top Chile Government copper man told a McGraw-Hill interviewer the present market will support 48c or more and that this is under consideration.

### MANGANESE

Indian manganese continues to be marketed in the U. S. only in small quantities. Buyers and dealers are hesitant to do business because of the high asking prices in India and high ocean freight rates.

Electro Metallurgical Co. raised prices of manganese containing alloys about 3.6% effective March 14, reflecting the high prices of manganese ore.

### ZINC—13½c East St. Louis

Zinc is firm at 13½c. Sales have been moderate this week. Some sellers say they are better than they expected. They indicate that the rise in Special High stocks was slight in February and say if there is a surge in parts manufacture for new cars in a few months, demand for Special High will be greater than it has ever been.

### LEAD—16c New York

Lead sales this week were 10,822 tons; last week's figure was 8,259 tons. Sellers say lead is in fair demand. They indicate many buyers believe there is little chance of a price fall. High prices in London are probably diverting from the U. S. some lead which is usually shipped here.

### QUICKSILVER—$259-$262 per flask, N. Y.

Little business is being done in quicksilver. Purchasers are keeping out of the market.

### CHART AND TABLES OF METAL PRICES

A graphical record of prices of copper, lead, zinc, aluminum, tin and quicksilver, in color, with tables on reverse side, is included as a supplement with this issue of *E&MJ Metal and Mineral Markets*.

# More Customers Buy More Non-Ferrous Metals From FEDERATED Than From Any Competing Smelter

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# E&MJ METAL AND MINERAL MARKETS

WEEKLY MARKET INFORMATION ISSUED BY THE PUBLISHERS OF ENGINEERING AND MINING JOURNAL

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E&MJ Metal and Mineral Markets is published each Thursday with a daily quotation for copper, lead, zinc, tin, and silver. Commodities that change infrequently are quoted at weekly or monthly intervals.

E&MJ METAL & MINERAL MARKETS Mar. 15, 1956, Vol. 27, No. 11. Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder. Executive, Editorial, Advertising and Publication office, 330 W. 42nd St., New York 36, N. Y. Donald C. McGraw, President; Paul Montgomery, Executive Vice President; Joseph A. Gerardi, Vice President and Treasurer; John J. Cooke, Secretary; Nelson Bond, Executive Vice President, Publications Division; Joseph H. Allen, Director of Advertising; Ralph B. Smith, Vice President and Editorial Director; J. E. Blackburn, Jr., Vice President and Circulation Director. Price per copy, 25 cents (United States currency). Subscriptions: Address correspondence to E&MJ Metal and Mineral Markets, Subscription service, 330 W. 42nd St., New York 36, N. Y. Allow 10 days for change of address. In the United States and Possessions $6 per year, $12 for 2 years, $16 for 3 years, Canada $10 per year, $16 for 2 years, $20 for 3 years. Other Western Hemisphere and the Philippine Islands $15 per year $25 for 2 years, $30 for 3 years. Elsewhere $25 per year, $40 for 2 years, $50 for 3 years. Please indicate position and company connection in all subscription orders.

Entered as second-class matter February 27, 1950, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Copyright 1956 by McGraw-Hill Publishing Co., Inc. Printed in U.S.A.


## Mercury Consumption Surges; 1955 Imports Fall Sharply

Mercury production in the U.S. rose 2% in 1955 as compared to 1954 figures. The 18,830 flasks reported during the year was the highest total since 1947, according to Bureau of Mines data.

Imports fell sharply during the year, although figures for the last quarter were double any of the three preceding quarters. Only 20,647 flasks were imported in 1955 compared to 65,316 in 1954. This was the smallest annual import total since 1945. The Bureau did not state reasons for the 1955 import decline.

Exports, though usually insignificant, dropped from 890 to 451 flasks in 1955.

Consumption in 1955 was up 34% above 1954 to 57,300 flasks, due mainly to a new chlorine and caustic soda plant using mercury cells, at Muscle Shoals, Ala.

Stocks at the end of 1954 were 22,300 flasks in the hands of consumers and dealers with producers holding 186 flasks. Due to minimum imports and increased consumption during 1955 stocks were down at the year's end to 7,600 flasks with dealers and consumers and 654 flasks with producers.

Of imports Mexico supplied 50%, Spain about 25% and Yugoslavia 20%. The United Kingdom shipped the U. S. one flask (76 lb) during 1955.

Mine production of mercury remained stable in the last quarter with identical figures of 1,730 flasks reported in November and December.

Mercury statistics for 1954, 1955 in flasks of 76 lb:

| | 1954 | 1955 | 1955 Oct.-Dec. |
|---|---|---|---|
| Production: | | | |
| Mine | 18,543 | 18,830 | 5,200 |
| Secondary | 6,100 | 9,990 | 1,370 |
| Imports | 65,316 | 20,647 | 8,719 |
| Exports | 890 | 451 | 154 |
| Consumption | 42,796 | 57,300 | 11,600 |

Principal producing properties in the fourth quarter, which accounted for 83% of total production:

California:
- Lake County—Sulphur Bank, Abbott
- San Benito County—New Idria (including San Carlos)
- Sonoma County—Mt. Jackson (including Great Eastern)

Idaho:
- Valley County—Hermes
- Washington County—Idaho Almaden

Nevada:
- Humboldt County—Cordero

Oregon:
- Douglas County—Bonanza
- Horse Heaven—Jefferson

Texas:
- Brewster County—Maggie Group, Fresno

The California mines listed below bring the total to 16 accounting for 89% of the 1955 output of mercury. Of the total California supplied 50%, Nevada, 30% and Idaho and Oregon together, 12%. The rest came from Alaska, Arizona and Texas:

California:
- San Benito County—North Star
- San Mateo County—Farm Hill No. 2
- San Luis Obispo County—La Libertad
- Santa Clara County—Guadalupe
- Sonoma County—Buckman

Virgin mercury consumed in the United States, 1953, '54 and '55 in flasks of 76 lb:

| | 1953 | 1954 | 1955 |
|---|---|---|---|
| Pharmaceuticals | 1,858 | 1,846 | 1,567 |
| Dental preparations | 1,117 | 1,409 | 913 |
| Agriculture (includes insecticides, fungicides, and bactericides for industrial purposes) | 6,936 | 7,651 | 7,351 |
| Antifouling paint | 655 | 512 | 722 |
| In the electrolytic preparation of chlorine and caustic soda | 2,380 | 2,137 | 3,091 |
| Catalysts | 826 | 594 | 707 |
| Electrical apparatus | 9,630 | 10,833 | 8,951 |
| Industrial and control instruments | 5,546 | 5,185 | 4,337 |
| General laboratory use | 1,241 | 1,129 | 780 |
| Redistilled | 7,784 | 9,281 | 9,607 |
| Other | 14,286 | 2,219 | 17,008 |
| Totals | 52,259 | 42,796 | 57,300 |

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## New Zinc Institute Film

"Zinc Controls Corrosion," a 16mm color film produced by the American Zinc Institute, tells how zinc controls corrosion to lengthen life and reduce maintenance costs of ferrous metals.

The film, 35 minutes long, will be available for group showing after March 15.

## February Zinc Unfilled Orders Decline About 15,000 Tons

American Zinc Institute statistics for February show unfilled orders dropped to 45,255 short tons, the lowest figure since November 1954. The figure is about 15,000 tons below the end of January figure. Some factors believe it indicates a slowing up of orders for Special High Grade resulting from automobile part manufacturers' reduction of production schedules. But sellers expressed no fear—they would like their Special High stocks to pick up a little.

Stocks of Prime Western dropped by about 2,800 tons; observers say that as long as the steel rate remains at present levels, consumption of Prime Western will continue high. In part, however, the drop in stocks reflects the fall in production of Prime Western (which was expected owing to the short month). Special High stocks rose about 600 tons even though output dropped about 3,200 tons.

Total domestic shipments of 84,727 tons in February were about 800 tons above the 1955 monthly average. Total shipments were about 5,000 tons under the 1955 monthly average owing to the decrease in the amounts shipped to the Government.

A summary of the January and February 1956 statistics of the American Zinc Institute, in short tons, follows:

| | Jan. | Feb. |
|---|---|---|
| Stock at beginning | 40,979 | 41,330 |
| Production | 90,313 | 86,329 |
| Production, daily rate | 2,913 | 2,977 |
| Shipments: | | |
| Domestic | 87,723 | 84,727 |
| Export & drawback | 1,084 | 317 |
| Government acc't. | 1,155 | 2,782 |
| Totals | 89,962 | 87,826 |
| Stock at end | 41,330 | 39,883 |
| Unfilled orders | 60,717 | 45,255 |

Slab zinc production for January and February, by grades, with minor deductions for metallurgical losses in upgrading metals, in tons:

| | Jan. | Feb. |
|---|---|---|
| Special High | 35,435 (a) | 32,288 |
| Regular High | 7,727 (a) | 10,526 |
| Intermediate | 1,632 (a) | 1,371 |
| Prime Western, etc. | 45,511 | 42,200 |
| Totals | 90,305 | 86,385 |

(a) Revised

Stocks of slab zinc at the end of January and February, by grades, in tons:

| | Jan. | Feb. |
|---|---|---|
| Special High | 6,014 | 6,622 |
| Regular High | 1,098 | 1,911 |
| Intermediate | 801 | 607 |
| Prime Western, etc. | 33,417 | 30,693 |
| Totals | 41,330 | 39,833 |

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## Canada May Mint Gold Coins

KIRKLAND LAKE (Reuters): Ontario Mines Minister, Philip Kelly, qualified a forecast he made recently that Canadian gold would be freed from its fixed price of $35 an ounce.

Kelly said he believed that within a year the Federal Government would be minting gold coins for general circulation. Such action would result in a premium as high as 15% on Canadian-minted gold coins and, in effect, free the "artificial" pegged price of $35 an ounce for gold, set by the United States, he added.

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## Miscellaneous Metals

Quotations cover wholesale lots, f.o.b. New York, unless otherwise specified.

*ALUMINUM* — Per lb., base price, f.o.b. shipping point, (freight allowed): 30 lb. ingot, 99% plus, 24.4c.; in pigs, 22.5c.

Base prices on aluminum ingot of higher purity: 99.75%, 24.9c.; 99.8%, 25.4c.; 99.85%, 26.4c.

*ANTIMONY* — Cents per lb., 99½% grade:

| | Domestic Boxed (a) New York | Domestic Bulk (b) Laredo |
|---|---|---|
| Mar. 8 | 36.470 | 33.000 |
| Mar. 9 | 36.470 | 33.000 |
| Mar. 10 | 36.470 | 33.000 |
| Mar. 12 | 36.470 | 33.000 |
| Mar. 13 | 36.470 | 33.000 |
| Mar. 14 | 36.470 | 33.000 |

(a) Boxed (224 lb.) 10,000 lb. or more but less than carload. (b) In bulk, carload, f.o.b. Laredo; boxed one-half cent extra.

*BISMUTH* — Per lb., in ton lots, $2.25.

*CADMIUM* — Per lb., delivered.

| | Commercial (a) Sticks | Special (b) Shapes |
|---|---|---|
| Mar. 8 | $1.70 | $1.70 |
| Mar. 9 | 1.70 | 1.70 |
| Mar. 10 | 1.70 | 1.70 |
| Mar. 12 | 1.70 | 1.70 |
| Mar. 13 | 1.70 | 1.70 |
| Mar. 14 | 1.70 | 1.70 |

(a) Base price. (b) Special shapes to platers.

*CALCIUM*—Per lb., in ton lots, cast in slabs and small pieces, $2.05.

*CHROMIUM* — Per lb., 97% grade, 0.5% C, $1.25; 9-11% C, $1.34. (Usually sold as chrome-metal.)

Electrolytic chromium, commercial grade, 99% min., f.o.b. Niagara Falls, N. Y., per lb.: $1.25.

*COBALT*—Per lb., rondelles or granules, in 500 to 600 lb. containers, $2.60; in 100 lb. containers, $2.62; less than 100 lb. containers, $2.67. Prices ex. docks or store N. Y. or Niagara Falls.

Cobalt fines, $2.60 per lb. of Co contained, f.o.b. N. Y. or Niagara Falls, standard package of 650 lb.

*COLUMBIUM* — No quotation.

*GALLIUM* — Per gram, in 1,000 gram lots, $3; 1 to 999 grams, $3.25.

*GERMANIUM*—Per gram, f.o.b. Miami, Okla.

| | 1,000 gr. lots | 10,000 gr. lots |
|---|---|---|
| 1st reduction | 48½c | 44½c |
| Intrinsic metal | 53½c | 48½c |

*INDIUM* — Per oz. troy, 99.9%, $2.25.

*IRIDIUM* — Per oz. troy, $100@$110.

*LITHIUM* — Per lb. 98%, $11@$14.

*MAGNESIUM* — Per lb., 10,000 lb. lots: Pig ingot 99.8%, Freeport, Tex., 32.5c; Port Newark, N. J. 33.9c; Madison, Ill., 33.7c; Notched ingot, Freeport, 33.25c; Port Newark 34.7c; Madison, 34.5. Effective Aug. 16, 1955.

*MANGANESE*—Per lb., delivered, 95.5% Mn, 2 in. x down, carloads, bulk, 45c.; packed, 46¼c.

Electrolytic, per lb., f.o.b. Knoxville, Tenn., with freight allowed east of Mississippi; Min. 99.9% Mn.; Carload 30c.; ton lots, 32c. Premium for hydrogen-removed metal 0.75c, per pound.

*MOLYBDENUM* — Per lb., powdered carbon reduced fob Washington, Pa., $3.20.

*NICKEL* — Per lb., electrolytic cathodes, f.o.b. Port Colborne, Ont., contract price, 64½c, U.S. import duty included. Nickel oxide sinter, 60¾c per lb. of nickel content, f.o.b. Copper Cliff.

*OSMIUM* — Per oz., $80@$100, nominal.

*PALLADIUM* — Per oz troy, $23@$24.

*PLATINUM*—Per oz troy $97@$111. Our appraisal of the average price paid by consumers, based on our estimate of quantities sold by large refiners at relatively low prices, and amounts sold by others at higher prices, is $103.

*QUICKSILVER* — Per flask of 76 lb. $259@$262.

*RADIUM* — Per mg. radium content, $16@$21.50, as to quantity.

*RHODIUM* — Per oz. troy, $118@$125.

*RUTHENIUM* — Per oz. troy, $45@$55.

*SELENIUM* — Commercial grade, producers quote $13.50 per lb; distributors $15.50, eff. Feb. 1.

*SILICON* — Per lb., minimum, 97 percent Si, maximum 1 percent Fe, crushed, carload lots, in bulk, 20½c.

*SODIUM* — Per lb., carload lots, in drums, 16½c.; less than carload lots, 17c.

*TANTALUM* — Per kilo, base price, $137 for rod; sheet, $93.

*TELLURIUM* — Per lb., $1.50@$1.75.

*THALLIUM* — Per lb., $12.50.

*TITANIUM* — Per lb., Grade A-1, 99.3% plus, maximum 0.3% iron, $3.45 f.o.b. shipping center. (On maximum .5% iron, $3.15.) Effective Nov. 23, 1955.

*TUNGSTEN* — Per lb., 98.8% minimum 1,000 lb lots, $4.50, eff. Feb. 1. Hydrogen reduced, 99.9% plus, $5.

*VANADIUM* — Per lb, 100-lb lots, $3.45.

*ZIRCONIUM* — Per lb., sponge, $10.

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## Metallic Ores

Prices in tons of 2,000 lbs., or "units" of 20 lb., unless otherwise stated.

*ANTIMONY ORE*—Per unit of antimony contained, 50 to 55%, $3.20@$3.35; min. 60% $3.80@$3.90; min. 65% $3.95@$4.15.

*BERYLLIUM ORE* — Per unit BeO contained, 10-12% f.o.b. mine, Colorado, $46@$48, depending on quantity.

Imported ore, per short ton unit of BeO, c.i.f. U.S. ports, basis 10% to 12% BeO, $36@$37. Special material has been sold at about $39.

*CHROME ORE*—Per long ton, dry basis, subject to penalties if guarantees are not met, f.o.b. cars N. Y., Phila., Balt., etc.

Rhodesian:
48% $Cr_2O_3$, 3 to 1 ratio lump (b) $45.00@$46.00
48% $Cr_2O_3$, 2.8 to 1 ratio.. (b) $42.00@$43.00
48% $Cr_2O_3$, no ratio..... (b) $33.00@$35.00

South African (Transvaal):
48% $Cr_2O_3$, no ratio.....$31.00@$32.00
44% $Cr_2O_3$, no ratio.....$23.50@$24.50

Turkish (basis 48% 3 to 1):
48% $Cr_2O_3$, 3 to 1 ratio, lump and concentrates .....$52@$53
46% $Cr_2O_3$, 3 to 1 ratio, lump and concentrates .....$49.50@$51.
Pakistan (Baluchistan):
48% $Cr_2O_3$, 3 to 1 ratio .....(a)$49@$50
(a) Nominal. (b) Long term contracts.

*COBALT ORE* — Per lb of cobalt contained, f.o.b. Cobalt, Ont. 9% grade, $1.30; 10%, $1.40; 11%, $1.50; 12%, $1.60.

*COLUMBITE* — Per lb of pentoxide, $1.35@$1.65, basis 50% $Cb_2O_5$. Nominal.

*IRON ORE* — Per long ton, Lower Lake ports. Lake Superior ore:

*Mesabi non-bessemer*, 51½% iron, $10.95. Old Range, non-bessemer, $11.10.

*Mesabi, bessemer*, 51½% iron, $11.10. Old Range, bessemer, $11.25.

*Eastern ores*, cents per long ton unit, delivered at furnaces: Foundry and basic, 56@62%, 17@18c.

*Swedish*, 60@68% (contracts), per unit, 22c plus, depending on grade, c.i.f. Atlantic ports.

*Brazilian*, per gross ton, 68.5% iron, f.o.b. port of shipment: Contracts $11.50@$12.00; nearby business $12.25@$12.50.

*MANGANESE ORE* — Indian asking prices continue to rise; freight rates also are rising. Indian asking prices plus freight and insurance are about equal to $1.30 per ltu, c.i.f. U. S. ports. Buyers and importers resist these prices.

Indian ore was quotable at $1.18@$1.20 nominal, per long ton unit of Mn, c.i.f. U. S. ports, duty extra, basis 46 to 48% Mn, nearby positions.

On long-term contracts for ore from various sources, 46@48% Mn, quotations nominal.

Low iron, 48% Mn (max. 2% Fe), $1.24@$1.27 per long ton unit of Mn, duty extra.

Chemical grade, per ton, coarse or fine, minimum 84% $MnO_2$, carloads, in drums $96; burlap bags $90.50 f.o.b. Philadelphia.

*MOLYBDENUM ORE* — 90-95% $MoS_2$ concentrate. Per lb of contained Mo, f.o.b. Climax, Colo., $1.10 plus cost of containers; f.o.b. Washington, Pa., $1.15.

*TITANIUM ORE*—Per gross ton, ilmenite, 59.5% $TiO_2$, f.o.b. Atlantic seaboard, $26.25, nominal.

Rutile, per lb, minimum 94% concentrate, 10@15c, depending on time of delivery.

*TUNGSTEN ORE* — Per short ton unit of $WO_3$, concentrates of known good analysis, basis 65%:

Foreign ore, per short ton unit of $WO_3$, nearby arrival, c.i.f. U.S. ports, duty extra: Wolfram, $33.75@$34.25; scheelite $34@$34.50, depending on grade.

Western high grade scheelite concentrate, $63 per unit, f.o.b. mine.

North Carolina high grade concentrate, $63 per unit, f.o.b. mine.

London, per long ton unit of $WO_3$, buying prices, good ore: Wolfram 267s 6d bid, 272s 6d asked.


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**CHROME ORES** • Refractory • Metallurgical • Chemical
**MANGANESE ORES** • Metallurgical • Chemical
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*VANADIUM ORE* — Per lb $V_2O_5$ contained, domestic, 31c, f.o.b. mine.

*ZIRCON ORE* (sand) — Per long ton, c.i.f. Atlantic seaboard, minimum 65% $ZrO_2$, $48@$49.

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## Metallic Compounds

*ANTIMONY TRIOXIDE* — Per lb, carload lots, in bags, 29c; less than carload, 30½c.

*ARSENIOUS OXIDE* (arsenic trioxide), refined, white min. 99%, per lb, 5½c, in barrels carload lots delivered.

*COBALT OXIDE* — Ceramic grade 72½ to 73½% Co, $1.96 per lb east of Mississippi and $1.98½ per lb west of Mississippi. Quotations are for oxide packed in 350-lb containers.

*COPPER SULPHATE* — Per lb, in carload lots, 15.7c, large or small crystals, f.o.b. N.Y.

*GERMANIUM OXIDE*—Per gm., 27½c.


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***Tin***
***Antimony***

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## Rolled Metals, Etc.

*BRASS* — Cents per lb (base prices)

| | Sheet | Wire | Rods |
|---|---|---|---|
| Yellow Brass | 67.13 | 56.14 (a) | 45.65 |
| Best quality brass | 57.73 | 58.27 | 57.67 |
| Red brass 80% | 60.15 | 60.69 | 60.09 |
| Red brass 85% | 61.79 | 62.33 | 61.73 |
| Com'l bronze 90% | 63.98 | 64.52 | 63.92 |
| Gilding metal | 65.64 | 66.18 | 65.58 |

(a) Free cutting

*CADMIUM* — Per lb Special shapes, to platers, $1.70.

*COPPER* — Per lb Sheets, over 20 in. wide, 67.13c, rolls 20 in. and under, 65.16c; Wire, bare, carload lots f.o.b. mills 51.98c.

*LEAD SHEETS* — Per lb, full rolled, 140 sq ft 21½.

*MONEL METAL* — Per lb (base prices) Standard cold-rolled sheet, 78c; cold-rolled strip, 87c. Rods, hot-rolled 69c.

*NICKEL* — Per lb (base prices) sheets, cold-rolled, $1.02; rods, hot-rolled, 87c.

*NICKEL SILVER* — Per lb, sheets, 10% 66c; 18% 69.63c; wire and rods, 10% 68.33c.

*PHOSPHOR BRONZE* — Per lb, sheets, 5% tin, 80.99c; wire and rods, 5% 81.49c; 10% 87.53c.

*ZINC* — Per lb, carload lots f.o.b. mill (base price): Sheet 23@24c; ribbon 21½c; plates 20@22¼c, depending on size.

*ZINC DIE-CASTING ALLOY* — Ingot per lb, carload lots, delivered, 18@19c.

•

### United States Gold Price

The price paid by the United States Treasury for gold purchased by the mints continued at $35 per troy ounce of fine gold, less ¼ of 1%.

Actual payment by the United States Treasury for gold in imported and domestic ore or concentrate is at 99.75% of the price quoted by the Treasury, which at present is equal to $34.9125 per oz.

# Kennecott Copper Corporation
# Kennecott Sales Corporation

*Producers and Sellers of*

**Electrolytic Copper**
**Chino Fire Refined Copper (K.C.M.)**
**Braden Fire Refined Copper (★★★)**
**Molybdenite**

*Offices*

**161 East 42nd St., New York 17, N. Y.**


## U. S. Lead Imports Rise To 443,157 Tons in 1955

Total lead imports into the United States in 1955 increased about 5,000 tons above 1954 to 443,157 tons. The over-all jump was due to increased ore shipments to the United States during the year. In the same period import of pigs and bars declined 12,000 tons.

American Bureau of Metal Statistics show December 1955 imports totaling 50,237 tons. Ore imports during the month jumped 75% from 15,537 tons in November to 25,084 tons. Pig and bar imports remained at the same level, but stepped-up ore imports brought the monthly total to 50,237 tons, a gain of about 10,000 tons more than the November level.

Lead exports from the United States during 1955 were 416 tons with no country receiving more than 96 tons (Philippines). Exports in 1954 were 698 tons. December exports were 117 tons, an increase of 100 tons over November.

Lead import statistics for November and December and 1955 follow:

| Ore, matte, etc. | 1955 | Nov. | Dec. |
|---|---|---|---|
| Canada | 33,090 | 5,250 | 1,706 |
| Mexico | 2,200 | 90 | 257 |
| Guatemala | 5,209 | 274 | 959 |
| Honduras | 2,758 | 151 | 153 |
| Bolivia | 13,832 | 680 | 2,240 |
| Chile | 409 | ... | 234 |
| Colombia | 545 | ... | ... |
| Peru | 44,223 | 2,862 | 8,001 |
| Un. of So. Africa | 43,084 | 1,609 | 7,919 |
| Australia | 30,937 | 4,258 | 3,391 |
| Philippines | 2,635 | 337 | 221 |
| Others | 86 | 26 | 3 |
| Totals | 179,008 | 15,537 | 25,084 |
| Refined: | | | |
| Canada | 34,452 | 1,202 | 1,807 |
| Mexico | 93,368 | 13,225 | 11,565 |
| Peru | 24,512 | 2,612 | 1,249 |
| Belgium | 231 | ... | ... |
| Denmark | 2,295 | 331 | 222 |
| Germany | 496 | ... | 168 |
| Spain | 10,649 | 551 | 550 |
| U. K. | 47 | ... | ... |
| Yugoslavia | 35,659 | 1,929 | 4,794 |
| Algeria | 2,207 | ... | ... |
| Fr. Morocco | 5,594 | ... | ... |
| Australia | 54,530 | 4,948 | 4,798 |
| Others | 109 | ... | ... |
| Totals | 264,149 | 24,798 | 25,153 |
| Combined Totals | 443,157 | 40,335 | 50,237 |

•

## U. S. Silver Production Down 1%

Mine output of recoverable silver in 1955 was 1% less than 1954, according to Bureau of Mines statistics. Idaho, as usual, maintained its position as the leading silver-producing state followed in order by Utah, Montana and Arizona, the same since 1943. These states were responsible for 84% of the total U. S. silver output in 1955.

Among the important silver-produing states, Arizona, California, New Mexico, South Dakota and Washington had gains of 10, 194, 112, 2 and 35% respectively. Drops of 18 and 12% were reported for Colorado and Idaho respectively. Alaska and Utah approximated totals of the previous year in 1955.

About two-thirds of Idaho's silver comes from ore of which silver is the principal product. The remainder of the domestic silver production is recovered as a byproduct of base metal ores and gold ores. Total output for 1955 was 36,734,565 fine oz.

## Ceylonese Cabinet Disagrees On Ilmenite Exploitation

McGraw Hill World News (Colombo): Differences among members of the Ceylon cabinet over the grant of exploitation rights for extensive ilmenite deposits on the east coast of Ceylon are likely to delay a decision on the award of the concession. The Ceylon Government asked for offers for the sale of these rights last year, and of eight tenderers, three were picked for final selection. While some Ministers were in favor of granting the concession to a combine of two of the selected investing groups, the Minister of Industries has put forward the view that such a national asset as these ilmenite deposits should not be given over to any small group of private investors and that there should be a public corporation in which the government and a large section of the investing public could invest. His contention is that this was too vital a national asset for a small group to be given a concession.

Against this, there is another view—advocated by the influential *Ceylon Daily News*—that the concession should not be given out immediately to any private party but the government should wait until it is in a position to develop the deposits with a view to utilizing the refined mineral in Ceylon. The possibility of certain elements in the ilmenite sands being used for nuclear work is suggested and in view of this, the newspaper suggests that there should be no haste to export the sands in raw or refined form.

## WASHINGTON REPORT

**(A regular feature usually appearing the second week of each month)**

**URANIUM**—Extraction of uranium from lignite beds in western North and South Dakota may assure the U. S. of a permanent domestic source of the strategic atomic material which will make it independent of foreign imports, some observers say.

Atomic Energy Commission has contracted with a private pilot plant soon to be put up at the Colorado School of Mines to develop technical methods for recovering the uranium found in lignite beds. The plant, operated by Ohio Oil Co. and Arthur E. Pew Jr. of Philadelphia, will look for new ways to extract the metal—present ore refining techniques can't be applied to lignite.

Yield may run 0.2-0.4%, higher if carbonaceous material can be burned off. This is one of the hitches, however, as most lignite will not sustain combustion. Mining costs are another drawback to the new scheme. But the hope is that the vast lignite beds in the Dakotas will provide sufficient supply, even if the uranium-bearing lignite runs only 12-18 inches deep. This would point to open-pit mining.

If the pilot plant is successful, a full-scale extraction mill is planned for the fall of 1957.

**MARKET STATISTICS** — Bureau of Mines surveys of metal and mineral market figures are being revamped to cut red tape. Interior announced following paperwork changes last week:

Small consumers of ferroalloys will be requested to fill out only one short form instead of eight detailed forms they have been submitting. The new short form will cover chromium, cobalt, columbium-tantalum, nickel, tungsten and vanadium. Large users are asked to continue to report separately for these metals.

Titanium statistics will be gathered in one questionnaire, in place of three separate forms used for Mines Bureau, Business Census and Commerce Department's Business and Defense Services Administration.

Monthly surveys of the Aluminum Smelters Research Institute will be used by Mines Bureau, instead of requiring separate forms. Government will now canvass only non-members. Bureau will also make use of other trade association surveys, such as those reported by American Iron & Steel Institute and American Petroleum Institute.

The paperwork shortcuts are in line with Hoover Commission recommendations.

**TITANIUM PRICES**—Bureau of Mines metallurgists hope to bring titanium sponge costs and prices down sharply with new production methods. Electro-refining of titanium scrap is the process Government metallurgists are experimenting with.

The Bureau points to titanium sponge price reductions from $4.50 per pound at the start of 1955 down to $3.45 at year-end by metallurgical advances. Acting Bureau Director T. H. Miller said, however, the metal's usefulness as a construction metal for aircraft, ships and chemical plants can't be realized until the price is brought down "much further."

With the electro-refining process, various grades of scrap, sponge and alloys can be made to yield high grade pure metal.

**PRIMARY ALUMINUM**—14,000 tons of primary aluminum will flow into industrial channels as a result of the Government reducing its last call for the metal by that amount, according to Office of Defense Mobilization. This call was issued in September 1955, for 25,000 tons for delivery to the Government. Call for the remaining 11,000 tons—to be made available to the United Kingdom—is to be completed by May 31. ODM said the reduction will alleviate present shortage. It was possible because of industry production expansion plans, which also enabled ODM to reduce stockpile goals last fall.

**OVER-ALL MINERALS POLICY**—ODM is shaking off criticism from mining-state legislators on Capitol Hill to the effect that the Government lacks an over-all support program for metal and mineral production, markets and prices. Director Arthur Flemming and other ODM officials point to their agency's charter under the law, which fixes ODM's responsibility solely to maintain adequate production mobilization bases for strategic materials.

Flemming answered questioning from Senate Appropriations Subcommitteeman Henry C. Dworshak (R-Idaho) this month by pointing to "checks and balances built in" by the industry itself to limit ODM's function to strategic stockpile policy. ODM, Flemming told the Senate group, was part of the over-all policy guide rules set down by the President's Cabinet Committee on Minerals Policy last year, and said that long-range economic planning as well as ODM's emergency programs are being coordinated "at every major administrative level."

**1955 CONSUMPTION FIGURES** — Interior Department surveys show 1955 consumption boosts for the following materials:

Lead—estimated 1.2-million short tons, up from 1.1 in 1954; copper—1.5-million short tons, up from 1.3; tin—91,000 long tons, up from 83,000; nickel—214.7-million lb, up from 190-million lb.

**RED TRADE**—The Senate's permanent investigating subcommittee looking into U. S. allies trade in copper and other strategic materials with Red China and other Communist countries heard Harold Stassen, former Foreign Aid Chief, explain last week that basic copper is embargoed, but copper wire is not. Western European nations took the position that Russia already produces enough copper for its own and its allies' military needs, and that any imports would go to civilian uses.

Earlier British Ambassador Roger Makins testified before the group; denied England is trading in copper and other metals to the extent reported here. Copper wire exports to all countries from Britain total 87.4-million lb over the past 24 months, Makins said, in contrast to the reported 200-million lb figure.

**SCRAP EXPORT CONTROLS**—Tighter scrap export controls were asked by Lukens Steel Co.'s board chairman Robert W. Wolcott, in testimony before the House Banking and Currency Committee last week. Wolcott voiced the industry view that scrap supply is "tight"—a view in direct opposition to the Department of Commerce's previous stand before the same committee.

LEAD
ZINC OXIDES · CADMIUM
ZINC
ST. JOSEPH
LEAD COMPANY
The Largest Producer of Lead in the United States
250 PARK AVE. · NEW YORK 17
TEL. ELDORADO 5-3200

ORES
METALS
ALLOYS
Phibro
Philipp Brothers, Inc.
70 PINE STREET, New York 5, N. Y.
Cables: PHIBRO, N. Y.

## Ferroalloys

(on contract, eff. 1 Jan. 1956, unless otherwise indicated)

*FERROCHROMIUM* – per lb contained Cr; carload lots, lump, bulk; fob dest. cont. USA–

High Carbon (4-9% C, 65-70% Cr) 26.25c

Low Carbon (0.06% C, 67-72% Cr) 36.50c

Special (0.01% C, 63-66% Cr) 32.75c.

*FERROCOLUMBIUM*–per lb contained Cb; ton lots, lump (2 in.), packed; fob dest. cont. USA–

(50-60% Cb, max 0.40% C, max 8% Si) $6.90

*FERROMANGANESE*: Standard – per lb; carload lots, lump, bulk; fob shipg pt–

(74-76% Mn) 10.25@10.75c

Medium Carbon–per lb contained Mn; carload lots, lump, bulk; fob dest. cont. USA–

(80-85% Mn, 1¼-1½% C) 22.35@ 22.85c

Low Carbon–basis as for Med. Carbon–

(85-90% Mn, max 0.07% C) 30.95@ 31.95c

*FERROMOLYBDENUM* – per lb contained Mo; 5,000 or more lb lots; fob shipg pt–

(58-64% Mo) powdered, packed $1.66

Other sizes, packed $1.54

Calcium Molybate (Ca0 Mo03) lump, packed $1.34

Technical Molybdic Trioxide (Mo03) lump, bagged $1.30; lump, canned $1.31; briquets packed $1.33

*FERROPHOSPHORUS*–per gross ton; carload lots, lump, bulk (max 6 in.); fob shipg pt (equivalent to Tenn.)–

(23-26% P) $100 plus $4 per 1% above or below 24%

*FERROSILICON*–per lb contained Si; carload lots, lump, bulk; fob shipg pt–

(50% Si) 12.75c

*FERROTITANIUM*: Low Carbon – per lb contained Ti; ton or more lo's, lump (½ in. +), packed; fob dest. NE USA–

(40% Ti, max 0.10% C) $1.35

(25% Ti, max 0.10% C) $1.50

Medium Carbon–per net ton; carload lots, lump, packed; fob dest. NE USA–

(17-21% Ti, 3-5% C) $225

High Carbon–basis as for Med. Carbon–

(15-19% Ti, 6-8% C) $200

*FERROTUNGSTEN* – per lb contained W; 5,000 or more lb lots, lump (¼ in.), packed; fob dest. cont. USA–

(70-80% W) $3.45. Eff. Feb. 1.

*FERROVANADIUM* – per lb contained V; carload lots, var. sizes, packed; fob dest. cont. USA–

(50-55% V) Open Hearth $3.10, Crucible $3.20, High Speed $3.30.

*SILICOMANGANESE*–per lb; carload lots, lump, bulk; fob shipg pt

(1.5% C max, 18-20% Si) 11.50@12.00c

(2% C max, 15-17½% Si) 11.30@ 11.80c

(3% C max, 12-14½% Si) 11.10@ 11.60c

*SPIEGELEISEN*–per gross ton; carload lots, lump, bulk; fob Palmerton Pa.–

3% max Si, 16-19% Mn $89.50

3% max Si, 19-21% Mn $91.50

3% max Si, 21-23% Mn $94.00

# E&MJ QUOTATIONS

## Daily Prices of Metals

| Mar. | ELECTROLYTIC COPPER Domestic Refinery | Export Refinery | LEAD New York | LEAD St. Louis | ZINC Delivered (b) | ZINC East St. Louis | ALUMINUM Primary Pig 99% | TIN Straits New York | TIN 99% (a) New York |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 47.200 | 48.600 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.375 | 100.375 |
| 9 | 47.525 | 49.175 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.375 | 100.375 |
| 10 | No Market | 49.175 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.375 | 100.375 |
| 12 | 47.075 | 48.075 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.875 | 100.875 |
| 13 | 47.800 | 48.325 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.875 | 100.875 |
| 14 | 47.725 | 47.725 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.750 | 100.750 |
| Averages | 47.465 | 48.513 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.604 | 100.604 |
| Calendar Wk. Avgs. Mar. 5-10 | 46.975 | 48.304 | 16.000 | 15.800 | 14.000 | 13.500 | 22.500 | 101.333 | 100.333 |

(a) Nominal Quotation for tin content.

(b) Prime Western Zinc sold on delivered basis at centers where freight from East St. Louis exceeds one-half cent a pound.

The above quotations are our appraisal of the major United States markets, based on sales reported by producers and their agencies. They represent payments received by producers for the product. They are reduced to the basis of cash, New York or St. Louis, as noted. Prices in cents per pound.

Copper, lead and zinc quotations are based on sales for both prompt and future deliveries; tin quotations are for prompt delivery only.

**COPPER** prices, domestic, in the trade are quoted on a delivered basis, that is, delivered at consumer's plants. As delivery charges vary with the destination, the figures shown above are net prices at refineries on the Atlantic seaboard. Delivered prices in New England average 0.300c per pound above refinery basis.

**COPPER** quotations, foreign or export, reflect prices obtaining in the open market and are based on sales in the foreign market reduced to the f.o.b. refinery equivalent, Atlantic seaboard. On f.a.s. transactions we deduct 0.075c, for lighterage, etc., to arrive at the f.o.b. refinery quotation.

**COPPER** quotations are for ordinary forms of wirebars and ingot bars. The premiums on special shapes, effective in some instances on deliveries beginning Sept. 1, 1955, are: Standard ingots 0.25c per pound; slabs 0.55c and up, cakes 0.6c and up, depending on weight and dimensions; billets 1.725c and up, depending on dimensions and quality. Discount on cathodes 0.125c to 0.15c per pound.

**ZINC** quotations reflect sales of the Prime Western grade as well as sales of other grades when sold on a Prime Western basis. Premiums obtaining over Prime Western zinc in the East St. Louis market on the following grades, in cents per pound: Selected 0.10c; Brass Special 0.25c; Intermediate 0.5c. High Grade zinc sold on contract, delivered to the consumers' plants, commands a premium of 1.35c per pound over the East St. Louis basis for Prime Western; on Special High Grade the premium or differential is 1.75c per pound, effective Dec. 1, 1955.

**LEAD** quotations are for the common grade, and are based on sales of domestically refined metal sold to domestic consumers. The differential on sales in the Chicago district is 15 points under New York; for California 20 points under New York; for New England add 7½ points to the New York basis. Corroding grade commands a premium over common lead of 10 points.

**ALUMINUM** quotations refer to primary pig, 99%, delivered to consumers. The U.S. primary producers as well as the major exporter of primary aluminum to the U. S., quote prices delivered to consumers in the U. S. The weights are estimated on the basis of daily average primary capacity in those cases where daily sales or shipments are not available. Ingot sales by primary producers, reduced to the pig price, are included in calculating the quotation. The premium on standard ingots, 99+% is 1.9c per lb.

Note: The daily quotations for copper, lead and zinc are weighted averages of sales reported to E&MJ; weekly averages are arithmetical averages of the daily quotations; monthly averages are the arithmetical averages of the daily quotations.

## Silver, Gold, and Sterling Exchange

| Mar. | Silver N.Y. | Silver London | Sterling Exchange | London Gold (a) |
|---|---|---|---|---|
| 8 | 91.125 | 79.000 d. | 280.4218 | 249s. 7½d. |
| 9 | 91.125 | 79.000 d. | 280.4241 | 249s. 6¼d. |
| 10 | Not Quoted | | | |
| 12 | 91.125 | 79.000 d. | 280.4375 | 249s. 6¼d. |
| 13 | 91.125 | 79.000 d. | 280.5625 | 249s. 4¾d. |
| 14 | 91.125 | 79.000 d. | 280.6383 | 249s. 4¼d. |
| Av | 91.125 | — | 280.497 | — |
| Calendar Wk. Avgs. Mar. 5-10 | 91.125 | — | (a) Open market | |

The daily silver quotation reported by Handy & Harman, in cents and fractions of a cent per troy ounce, is the price paid by Handy & Harman in settlement for silver contained in unrefined silverbearing materials submitted to them for refining. It is determined on the basis of offers of bar silver .999 fine as made to Handy & Harman for nearby delivery at New York by regular suppliers in quantities sufficient to meet daily requirements, and it is usually one quarter cent below the price at which such offers are made.

The Treasury's purchase price of newly mined domestic silver was established at 90.5c per troy ounce, 1000 fine, effective on July 1, 1946 under an amendment to the Silver Purchase Act of July 6, 1939.

London silver quotations are in pence per troy ounce, basis .999 fine.

London gold quotations are per troy ounce, basis 1000 fine.

Sterling, in cents, N. Y. Federal Reserve Bank average of noon buying rates.

## London Metal Exchange

| Mar. | COPPER Cash Bid | COPPER Cash Asked | COPPER 3 Mo. Bid | COPPER 3 Mo. Asked | LEAD Current Month Bid | LEAD Current Month Asked | LEAD 3 Mo. Bid | LEAD 3 Mo. Asked | ZINC Current Month Bid | ZINC Current Month Asked | ZINC 3 Mo. Bid | ZINC 3 Mo. Asked | TIN Cash Bid | TIN Cash Asked | TIN 3 Mo. Bid | TIN 3 Mo. Asked |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 425 | 426 | 414 | 415 | 122 | 122¼ | 118½ | 118¾ | 102 | 102½ | 99 | 99¼ | 825 | 830 | 785 | 786 |
| 9 | 425 | 426 | 414 | 415 | 121¾ | 122 | 118¾ | 119 | 101¾ | 102¼ | 98½ | 98¾ | 830 | 835 | 793 | 795 |
| 12 | 424 | 425 | 413 | 414 | 120¾ | 121 | 118 | 118½ | 102¼ | 102¾ | 99¼ | 99½ | 825 | 832½ | 790 | 794 |
| 13 | 425 | 426 | 414 | 415 | 121 | 121¼ | 118½ | 118¾ | 102 | 102¼ | 99 | 99¼ | 827½ | 832½ | 796 | 797½ |
| 14 | 423 | 423½ | 413 | 413½ | 120 | 120¼ | 118 | 118¼ | 102¾ | 103 | 99 | 99¼ | 825 | 827½ | 790 | 792½ |

Prices are for the official a.m. session in pounds sterling per ton of 2240 lb. Copper basis wire bars, lead 99.97%, zinc 98% and tin min. 99.75%.

## THIS WEEK'S BUSINESS INDICATORS

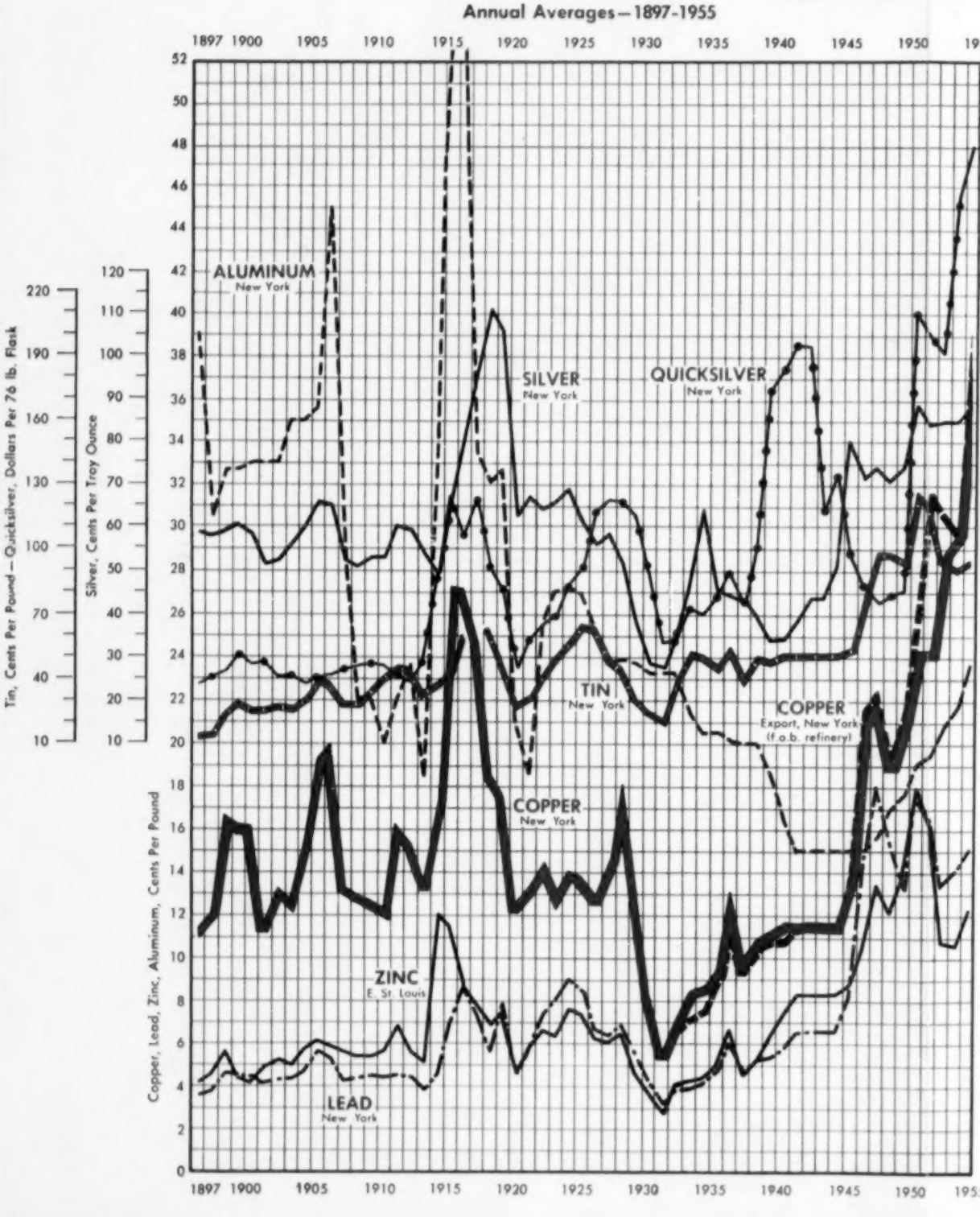
| | Latest Week | Preceding Week | Month Ago | Year Ago | Net Change Year Ago |
|---|---|---|---|---|---|
| Steel Rate (% of capacity in operation) | (d) 98.8 | (a) 100.0 | 98.8 | 94.2 | +4.6 |
| Steel Ingot Production, thousands of tons | (d) 2,433 | (a) 2,462 | 2,433 | 2,273 | +160 |
| Automobile Production (cars and trucks) | 166,239 | 167,422 | 165,110 | 204,285 | —38,046 |
| Electric Power Output (millions kwh.) | 11,199 | 11,277 | 11,540 | 9,727 | +1,472 |
| Engr'g Const. Awards, 4-week daily av., in thousands (c) | $77,439 | $64,254 | $74,063 | $59,103 | +$18,336 |
| Federal Reserve Index of Industrial Production (e) | 144 Feb. | ..... | 144 | 133 | +11 |
| E&MJ Index of Nonferrous Metal Prices (b) | 241.49 Feb. | ..... | 239.43 | 197.03 | +2.04 |
| All Commodities, Bureau of Labor Statistics (e) | 111.9 Feb. | ..... | 111.8 | 110.4 | +1.5 |

(a) Revised. (b) 100 is composite of 1922-3-4. (c) From Eng. News-Record. (d) Preliminary. (e) Base period 1947-49

# E&MJ Meta

As Published in Engineering & Mining Journal an

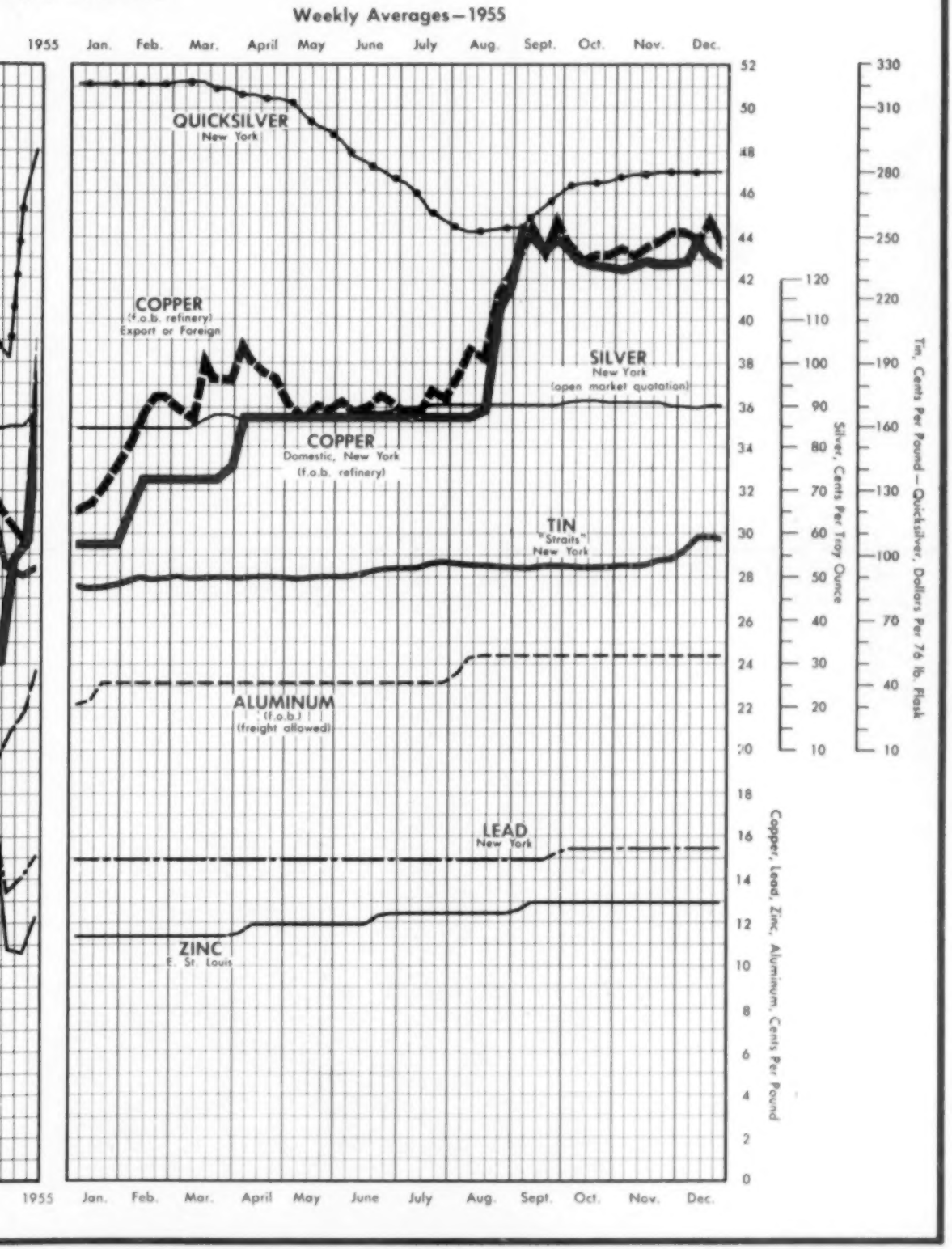
McGraw-Hill Publishing Compan



# tal Prices

**al and E&MJ Metal and Mineral Markets**

**ompany, Inc., New York**


Weekly Averages—1955
1955 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec.
QUICKSILVER
New York
COPPER
(f.o.b. refinery)
Export or Foreign
SILVER
New York
(open market quotation)
COPPER
Domestic, New York
(f.o.b. refinery)
TIN
"Straits"
New York
ALUMINUM
(f.o.b.)
(freight allowed)
LEAD
New York
ZINC
E. St. Louis
Copper, Lead, Zinc, Aluminum, Cents Per Pound
Silver, Cents Per Troy Ounce
Tin, Cents Per Pound—Quicksilver, Dollars Per 76 lb. Flask
52 50 48 46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0
120 110 100 90 80 70 60 50 40 30 20 10
330 310 280 250 220 190 160 130 100 70 40 10
1955 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec.

# E & M J Annual Average Metal Prices—1897 to 1955

| Year | COPPER (a) Electrolytic Refinery | COPPER Export or Foreign Refinery | LEAD, Common, N. Y. | ZINC, Prime Western (b) E. St. Louis | TIN, (c) N. Y. | SILVER, (e) N. Y. | QUICKSILVER, (f) N. Y. | ALUMINUM Ingot |
|---|---|---|---|---|---|---|---|---|
| 1897 | 11.29 | ..... | 3.580 | 4.120 | 13.67 | 59.790 | 38.50 | 39.00 |
| 1898 | 12.03 | ..... | 3.780 | 4.570 | 15.70 | 58.260 | 40.70 | 30.58 |
| 1899 | 16.67 | ..... | 4.470 | 5.750 | 25.12 | 59.580 | 43.63 | 32.72 |
| 1900 | 16.19 | ..... | 4.370 | 4.390 | 29.90 | 61.330 | 51.00 | 32.72 |
| 1901 | 16.11 | ..... | 4.330 | 4.070 | 16.74 | 58.950 | 47.00 | 33.00 |
| 1902 | 11.026 | ..... | 4.069 | 4.840 | 26.79 | 52.160 | 48.03 | 33.00 |
| 1903 | 13.235 | ..... | 4.237 | 5.191 | 28.09 | 53.570 | 41.32 | 33.00 |
| 1904 | 12.823 | ..... | 4.309 | 4.931 | 27.99 | 57.221 | 41.00 | 35.00 |
| 1905 | 15.590 | ..... | 4.707 | 5.730 | 31.358 | 60.352 | 38.50 | 35.00 |
| 1906 | 19.278 | ..... | 5.657 | 6.048 | 39.819 | 66.791 | 40.90 | 35.75 |
| 1907 | 20.004 | ..... | 5.325 | 5.812 | 38.166 | 65.237 | 41.50 | 45.00 |
| 1908 | 13.208 | ..... | 4.200 | 4.578 | 29.465 | 52.864 | 44.84 | 28.70 |
| 1909 | 12.982 | ..... | 4.273 | 5.352 | 29.725 | 51.502 | 46.30 | 22.00 |
| 1910 | 12.738 | ..... | 4.446 | 5.370 | 34.123 | 53.486 | 47.06 | 22.25 |
| 1911 | 12.376 | ..... | 4.420 | 5.608 | 42.281 | 53.304 | 46.54 | 20.07 |
| 1912 | 16.341 | ..... | 4.471 | 6.799 | 46.096 | 60.835 | 42.46 | 22.01 |
| 1913 | 15.269 | ..... | 4.370 | 5.504 | 44.252 | 59.791 | 39.54 | 23.64 |
| 1914 | 13.602 | ..... | 3.862 | 5.061 | 34.301(d) | 54.811 | 48.31 | 18.63 |
| 1915 | 17.275 | ..... | 4.673 | 13.054 | 38.590 | 49.684 | 87.01 | 33.98 |
| 1916 | 27.202 | ..... | 6.858 | 12.634 | 43.480 | 65.661 | 125.49 | 60.71 |
| 1917 | 27.180 | ..... | 8.787 | 8.813 | 61.802 | 81.417 | 106.30 | 51.59 |
| 1918 | 24.628 | ..... | 7.413 | 7.890 | 88.750 | 96.772 | 123.47 | 33.53 |
| 1919 | 18.691 | ..... | 5.759 | 6.988 | 63.328 | 111.122 | 92.15 | 32.14 |
| 1920 | 17.456 | ..... | 7.957 | 7.671 | 48.273 | 100.900 | 81.12 | 32.72 |
| 1921 | 12.502 | ..... | 4.545 | 4.655 | 29.916 | 62.654 | 45.46 | 21.11 |
| 1922 | 13.382 | ..... | 5.734 | 5.716 | 32.554 | 67.528 | 58.95 | 18.68 |
| 1923 | 14.421 | ..... | 7.267 | 6.607 | 42.664 | 64.873 | 66.50 | 25.41 |
| 1924 | 13.024 | ..... | 8.097 | 6.344 | 50.176 | 66.781 | 69.76 | 27.03 |
| 1925 | 14.042 | ..... | 9.020 | 7.622 | 57.893 | 69.065 | 83.13 | 27.19 |
| 1926 | 13.795 | ..... | 8.417 | 7.337 | 65.285 | 62.107 | 91.90 | 26.99 |
| 1927 | 12.920 | ..... | 6.755 | 6.242 | 64.353 | 56.370 | 118.16 | 25.40 |
| 1928 | 14.570 | ..... | 6.305 | 6.027 | 50.427 | 58.176 | 123.51 | 24.300 |
| 1929 | 18.107 | ..... | 6.833 | 6.512 | 45.155 | 52.993 | 122.15 | 24.300 |
| 1930 | 12.982 | ..... | 5.517 | 4.556 | 31.694 | 38.154 | 115.01 | 23.787 |
| 1931 | 8.116 | ..... | 4.243 | 3.640 | 24.467 | 28.700 | 87.35 | 23.300 |
| 1932 | 5.555 | ..... | 3.180 | 2.876 | 22.017 | 27.892 | 57.93 | 23.300 |
| 1933 | 7.025 | 6.713 | 3.869 | 4.029 | 39.110 | 34.727 | 59.23 | 23.300 |
| 1934 | 8.428 | 7.271 | 3.860 | 4.158 | 52.191 | 47.973 | 73.87 | 23.300 |
| 1935 | 8.649 | 7.538 | 4.065 | 4.328 | 50.420 | 64.273 | 71.99 | 20.000 |
| 1936 | 9.474 | 9.230 | 4.710 | 4.901 | 46.441 | 45.087 | 79.92 | 20.000 |
| 1937 | 13.167 | 13.018 | 6.009 | 6.519 | 54.337 | 44.883 | 90.18 | 19.917 |
| 1938 | 10.000 | 9.695 | 4.739 | 4.610 | 42.301 | 43.225 | 75.47 | 20.000 |
| 1939 | 10.965 | 10.727 | 5.053 | 5.110 | 50.323 | 39.082 | 103.94 | 20.000 |
| 1940 | 11.296 | 10.770 | 5.179 | 6.335 | 49.827 | 34.773 | 176.86 | 18.691 |
| 1941 | 11.797 | 10.901 | 5.793 | 7.474 | 52.018 | 34.783 | 185.02 | 16.500 |
| 1942 | 11.775 | 11.684 | 6.481 | 8.250 | 52.000 | 38.333 | 196.35 | 15.000 |
| 1943 | 11.775 | 11.700 | 6.500 | 8.250 | 52.000 | 44.750 | 195.21 | 15.000 |
| 1944 | 11.775 | 11.700 | 6.500 | 8.250 | 52.000 | 44.750 | 118.36 | 15.000 |
| 1945 | 11.775 | 11.700 | 6.500 | 8.250 | 52.000 | 51.928 | 134.89 | 15.000 |
| 1946 | 13.820 | 14.791 | 8.109 | 8.726 | 54.544 | 80.151 | 98.24 | 15.000 |
| 1947 | 20.958 | 21.624 | 14.673 | 10.500 | 77.949 | 71.820 | 83.74 | 15.000 |
| 1948 | 22.038 | 22.348 | 18.043 | 13.589 | 99.250 | 74.361 | 76.49 | 15.733 |
| 1949 | 19.202 | 19.421 | 15.364 | 12.144 | 99.336 | 71.930 | 79.46 | 17.000 |
| 1950 | 21.235 | 21.549 | 13.296 | 13.866 | 95.539 | 74.169 | 81.26 | 17.713 |
| 1951 | 24.200 | 26.258 | 17.500 | 18.000 | 127.077 | 89.368 | 210.13 | 19.000 |
| 1952 | 24.200 | 31.746 | 16.467 | 16.215 | 120.473 | 84.941 | 199.097 | 19.410 |
| 1953 | 28.798 | 30.845 | 13.489 | 10.855 | 95.845 | 85.188 | 193.032 | 20.931 |
| 1954 | 29.694 | 29.889 | 14.054 | 10.681 | 91.838 | 85.250 | 264.386 | 21.784 |
| 1955 | 37.491 | 39.115 | 15.138 | 12.229 | 94.735 | 89.099 | 290.348 | 23.668 |

(a) Lake copper 1897–98: domestic market since 1932. (b) New York delivery 1898–1902. (c) 99 per cent in 1897 to 1920, inclusive: Straits quality thereafter. (d) Average for eleven months. (e) New York market. . . . All quotations in cents per lb, except for silver, which are in cents per troy oz, and (f) quicksilver, which are in dollars per flask of 76 lb. See opposite page and reverse for weekly average prices for 1955.

# E & M J Weekly Average Metal Prices—1955

| | COPPER | | LEAD | ZINC | TIN | SILVER | QUICK- | ALUM- |
|---|---|---|---|---|---|---|---|---|
| | Domestic, Refinery | Foreign, Refinery | N. Y., Common | E. St. Louis Prime Western | N. Y., "Straits" | N. Y., Foreign | SILVER N. Y. | INUM 99% plus, Ingot |
| Jan. 5 | 29.700 | 31.295 | 15.000 | 11.500 | 87.500 | 85.250 | 322.000 | 22.200 |
| 12 | 29.700 | 31.567 | 15.000 | 11.500 | 86.229 | 85.250 | 322.000 | 22.367 |
| 19 | 29.700 | 32.408 | 15.000 | 11.500 | 86.542 | 85.250 | 322.000 | 23.200 |
| 26 | 29.700 | 33.279 | 15.000 | 11.500 | 87.688 | 85.250 | 322.000 | 23.200 |
| Feb. 2 | 31.250 | 34.433 | 15.000 | 11.500 | 89.604 | 85.250 | 322.000 | 23.200 |
| 9 | 32.700 | 35.804 | 15.000 | 11.500 | 91.250 | 85.250 | 322.000 | 23.200 |
| 16 | 32.700 | 36.708 | 15.000 | 11.500 | 90.475 | 85.250 | 322.000 | 23.200 |
| 23 | 32.700 | 36.729 | 15.000 | 11.500 | 90.725 | 85.250 | 322.000 | 23.200 |
| Mar. 2 | 32.700 | 36.238 | 15.000 | 11.500 | 91.188 | 85.250 | 323.000 | 23.200 |
| 9 | 32.700 | 35.788 | 15.000 | 11.500 | 90.875 | 85.250 | 323.000 | 23.200 |
| 16 | 32.700 | 38.661 | 15.000 | 11.500 | 91.021 | 87.050 | 323.000 | 23.200 |
| 23 | 32.700 | 37.504 | 15.000 | 11.500 | 91.271 | 88.750 | 320.000 | 23.200 |
| 30 | 33.180 | 37.454 | 15.000 | 11.500 | 91.250 | 88.500 | 320.000 | 23.200 |
| Apr. 6 | 35.700 | 39.158 | 15.000 | 11.592 | 90.917 | 87.600 | 317.000 | 23.200 |
| 13 | 35.700 | 38.292 | 15.000 | 12.000 | 91.438 | 87.000 | 317.000 | 23.200 |
| 20 | 35.700 | 37.775 | 15.000 | 12.000 | 91.833 | 87.000 | 315.000 | 23.200 |
| 27 | 35.700 | 37.483 | 15.000 | 12.000 | 91.521 | 87.000 | 315.000 | 23.200 |
| May 4 | 35.700 | 36.325 | 15.000 | 12.000 | 91.188 | 87.000 | 313.000 | 23.200 |
| 11 | 35.700 | 35.788 | 15.000 | 12.000 | 91.021 | 87.300 | 307.000 | 23.200 |
| 18 | 35.700 | 36.271 | 15.000 | 12.000 | 91.458 | 89.582 | 302.000 | 23.200 |
| 25 | 35.700 | 36.058 | 15.000 | 12.000 | 91.625 | 90.214 | 300.000 | 23.200 |
| June 1 | 35.700 | 36.504 | 15.000 | 12.000 | 91.625 | 90.375 | 295.000 | 23.200 |
| 8 | 35.700 | 36.025 | 15.000 | 12.000 | 91.896 | 90.250 | 288.000 | 23.200 |
| 15 | 35.700 | 36.183 | 15.000 | 12.000 | 93.375 | 89.450 | 285.000 | 23.200 |
| 22 | 35.700 | 36.754 | 15.000 | 12.421 | 94.417 | 89.250 | 281.000 | 23.200 |
| 29 | 35.700 | 36.471 | 15.000 | 12.500 | 94.875 | 89.550 | 278.000 | 23.200 |
| July 6 | 35.700 | 35.988 | 15.000 | 12.500 | 95.150 | 90.125 | 275.000 | 23.200 |
| 13 | 35.700 | 35.925 | 15.000 | 12.500 | 95.438 | 90.125 | 270.000 | 23.200 |
| 20 | 35.700 | 37.025 | 15.000 | 12.500 | 97.313 | 90.700 | 262.000 | 23.200 |
| 27 | 35.700 | 36.704 | 15.000 | 12.500 | 98.375 | 90.750 | 259.000 | 23.200 |
| Aug. 3 | 35.700 | 37.679 | 15.000 | 12.500 | 97.521 | 90.750 | 255.000 | 23.600 |
| 10 | 35.700 | 38.854 | 15.000 | 12.500 | 96.979 | 90.750 | 253.000 | 24.300 |
| 17 | 35.970 | 38.521 | 15.000 | 12.500 | 96.417 | 90.750 | 253.000 | 24.400 |
| 24 | 40.575 | 41.292 | 15.000 | 12.500 | 96.167 | 90.750 | 254.000 | 24.400 |
| 31 | 41.825 | 42.321 | 15.000 | 12.500 | 95.792 | 90.750 | 255.000 | 24.400 |
| Sept. 7 | 44.556 | 43.558 | 15.000 | 12.640 | 95.400 | 90.750 | 255.000 | 24.400 |
| 14 | 44.260 | 44.863 | 15.000 | 13.000 | 95.792 | 90.750 | 260.000 | 24.400 |
| 21 | 43.665 | 43.650 | 15.000 | 13.000 | 96.667 | 90.750 | 265.000 | 24.400 |
| 28 | 44.065 | 45.192 | 15.250 | 13.000 | 96.875 | 90.750 | 270.000 | 24.400 |
| Oct. 5 | 43.670 | 43.888 | 15.500 | 13.000 | 96.333 | 91.650 | 274.000 | 24.400 |
| 12 | 43.063 | 43.146 | 15.500 | 13.000 | 96.025 | 91.906 | 275.000 | 24.400 |
| 19 | 42.945 | 43.358 | 15.500 | 13.000 | 96.000 | 91.925 | 275.000 | 24.400 |
| 26 | 42.815 | 43.358 | 15.500 | 13.000 | 96.063 | 91.625 | 276.000 | 24.400 |
| Nov. 2 | 42.705 | 43.708 | 15.500 | 13.000 | 96.375 | 91.625 | 278.000 | 24.400 |
| 9 | 42.900 | 43.404 | 15.500 | 13.000 | 96.300 | 91.625 | 279.000 | 24.400 |
| 16 | 43.144 | 43.829 | 15.500 | 13.000 | 96.950 | 91.625 | 279.000 | 24.400 |
| 23 | 42.985 | 43.963 | 15.500 | 13.000 | 98.917 | 91.625 | 280.000 | 24.400 |
| 30 | 42.956 | 44.392 | 15.500 | 13.000 | 99.275 | 90.844 | 280.000 | 24.400 |
| Dec. 7 | 43.075 | 44.404 | 15.500 | 13.000 | 103.229 | 90.414 | 280.000 | 24.400 |
| 14 | 44.185 | 44.125 | 15.500 | 13.000 | 109.458 | 90.278 | 280.000 | 24.400 |
| 21 | 43.445 | 45.113 | 15.500 | 13.000 | 109.708 | 90.600 | 280.000 | 24.400 |
| 28 | 43.069 | 44.120 | 15.500 | 13.000 | 108.800 | 90.500 | 280.000 | 24.400 |

## 1955 Antimony Output Up 3%; Consumption Unchanged

Antimony output for 1955 was 3% higher than the 7,900 tons produced in 1954. Total domestic mine production dropped 17% from the 1954 level of 633 tons, however. Total consumption for the year was expected to be virtually unchanged from 12,200 tons consumed in 1954. Of the total 61% went into non-metal products with the remainder used in metal products.

Total imports of antimony during the year were 13,000 tons, compared to a mark of 8,800 in 1954 and 11,500 tons in 1953. Exports of metal and alloys were 204 tons. This total was about five times the 1954 level of 44 tons and the highest point since 1949.

Of the imports, ore and concentrates were 7,470 tons with Mexico, Bolivia and South Africa supplying about 2,000 tons each. Belgium and Mexico were the dominant sources of the 3,671 ton metal import. United Kingdom furnished nearly all of the oxide imported during the year. Sulphide imports were 32 tons.

Salient statistics of antimony in 1954 and preliminary figures for 1955:

| | 1954 | 1955 |
|---|---|---|
| Stocks beginning of period | 6,863 | .... |
| Mine production | 766 | 633 |
| Smelter production | 7,912 | 8,135 |
| Production of secondary antimony | 22,358 | 20,665 |
| Antimony content of antimonial lead produced by primary lead refineries from domestic and foreign ore | 1,956 | 2,172 |
| General imports | 8,795 | 13,007 |
| Exports of ore, metal and alloys | 44 | 212 |
| Consumption of primary antimony | 12,180 | 11,918 |
| Stocks at end | 7,206 | .... |

Smelter production of primary antimony in 1954 and preliminary totals for 1955 in short tons, antimony content:

| | 1954 | 1955 |
|---|---|---|
| Metal | 2,178 | 2,138 |
| Oxide | 4,925 | 5,390 |
| Sulphide | 124 | 89 |
| Residues and slag | 685 | 518 |
| Total | 7,912 | 8,135 |

Consumption of primary antimony by type of material in 1954 and preliminary totals for 1955 in short tons, antimony content:

| | 1954 | 1955 |
|---|---|---|
| Ore and concentrates | 768 | 568 |
| Metal | 4,609 | 3,936 |
| Oxide | 5,885 | 6,452 |
| Sulphide | 94 | 103 |
| Residues and slag | 824 | 859 |
| Total | 12,180 | 11,918 |

Smelters', consumers' and dealers' stocks of antimony end of 1954 and 1955 in short tons, antimony content:

| | 1954 | 1955 Dec. 31 |
|---|---|---|
| Ore and concentrates | 2,221 | 3,433 |
| Metal | 1,577 | 1,264 |
| Oxide | 2,751 | 3,048 |
| Sulphide | 135 | 120 |
| Residues and slag | 522 | 445 |
| Total | 7,206 | 8,310 |

Consumption of primary antimony by uses in 1954 and preliminary totals for 1955 in short tons:

| Metal products: | 1954 | 1955 |
|---|---|---|
| Antimonial lead | 1,531 | 1,056 |
| Battery metal | 1,583 | 1,148 |
| Bearings | 816 | 733 |
| Type | 613 | 452 |
| Others | 782 | 525 |
| Total | 5,325 | 3,941 |
| **Non-metal products:** | | |
| Flameproof coatings, compounds | 316 | 433 |
| Flameproof textiles | 950 | 458 |
| Frits, ceramic enamels | 706 | 964 |
| Glass, pottery | 763 | 957 |
| Paint, lacquer | 681 | 141 |
| Pigments | 700 | 799 |
| Plastics | 620 | 618 |
| Others | 5,819 | 1,847 |
| Total | 6,855 | 6,217 |

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## Aluminum Smelting Equipment

LONDON (Reuters): The British Aluminium Co. subsidiary, Canadian British Aluminium Co. Ltd., is placing £2,250,000 orders with two British companies for electric conversion equipment for a new smelting plant at Baie Comeau, Quebec, states the British Thomson-Houston Co., Ltd.

A £1,750,000 contract is being made with British Thomson-Houston and one of £500,000 with the English Electric Co.

This is the largest order yet placed in the U. K. for a rectifier conversion plant.

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## U. S. Gold Production Up 3%

Domestic mine production of recoverable gold was 3% higher in 1955 than in 1954, according to Bureau of Mines data. Output in 1955 was 1,884,186 fine oz.

South Dakota, Utah and California, in that order, were the leading gold-producing states in 1955. Alaska was fourth. This group accounted for 78% of the U. S. total in 1955. Nearly all the gold output of South Dakota and Alaska and most of that produced by California is the result of straight gold mining operations. The remainder of the U. S. yield is as a by-product of base-metal mining.

## First Figures Indicate 20% Bismuth Consumption Rise

Preliminary Bureau of Mines data indicate an over-all bismuth metal consumption of 1,731,000 lb in 1955, an increase of 20% over 1954. Year-end stocks were down 15% as compared to Jan. 1. Imports for the year were also down about 8% from 644,300 lb in 1954. Mexico and Peru continued as principal suppliers. Total exports soared 48% above the 137,900 lb reported in 1954.

Consumption of bismuth metal by uses in 1954 and preliminary totals for 1955 in pounds:

| | 1954 | 1955 Oct.-Dec. | 1955 |
|---|---|---|---|
| Fuse metal | 192,300 | 68,000 | 169,100 |
| Solder | 139,600 | 32,300 | 136,900 |
| Other alloys | 415,000 | 181,200 | 644,700 |
| Selenium rectifiers | 42,600 | 4,800 | 32,900 |
| Pharmaceuticals | 433,500 | 101,200 | 459,300 |
| Other uses | 216,000 | 46,400 | 288,100 |
| Total | 1,439,000 | 433,900 | 1,731,000 |

General imports of bismuth into the United States in 1954 and preliminary totals for 1955 in pounds:

| | 1954 | 1955 Oct.-Dec. | 1955 |
|---|---|---|---|
| Canada | 34,700 | 14,600 | 54,800 |
| Japan | ... | 7,400 | 7,400 |
| R. O. K. | 67,400 | ... | ... |
| Mexico | 63,900 | 24,600 | 123,700 |
| Netherlands | 3,300 | ... | 17,200 |
| Peru | 400,300 | 56,700 | 326,469 |
| Yugoslavia | 74,700 | 19,900 | 66,100 |
| Total | 644,300 | 123,200 | 595,600 |

Exports of bismuth and alloys from the United States in 1954 and preliminary totals for 1955 in pounds:

| | 1954 | 1955 Oct.-Dec. | 1955 |
|---|---|---|---|
| Brazil | 5,200 | ... | 300 |
| France | ... | ... | 62,500 |
| W. Germany | 45,000 | ... | 9,200 |
| India | 5,000 | ... | ... |
| Netherlands | 33,800 | 2,400 | 104,700 |
| United Kingdom | 46,400 | ... | 24,800 |
| Other | 2,500 | 100 | 2,200 |
| Total | 137,900 | 2,500 | 203,700 |

## Slab Zinc Production by Countries

(Data from American Bureau of Metal Statistics in short tons)

| | Jan.-Dec. 1954 | Jan.-Nov. 1955 | Sept. 1955 | Oct. 1955 | Nov. 1955 | Dec. 1955 | Jan. 1956 |
|---|---|---|---|---|---|---|---|
| United States (a) (b) | 868,242 | 938,440 | 83,448 | 89,449 | 87,616 | 92,578 | 90,313 |
| Canada (c) | 213,810 | 235,875 | 20,898 | 22,206 | 21,398 | 21,135 | 21,696 |
| Mexico | 60,477 | 56,627 | 4,967 | 5,212 | 5,066 | 5,252 | 5,279 |
| Peru (d) | 16,982 | 19,007 | 1,754 | 1,545 | 818 | ... | ... |
| Belgium (e) | 234,896 | 212,757 | 18,863 | 19,345 | 19,244 | 20,079 | ... |
| France (a) | 122,248 | 113,290 | 7,603 | 10,262 | 9,848 | 10,332 | ... |
| Fed. Rep. of Germany | 184,806 | 179,961 | 16,496 | 16,735 | 15,708 | 17,061 | ... |
| Italy | 74,356 | 70,888 | 6,323 | 6,906 | 6,183 | 6,420 | ... |
| Netherlands | 28,686 | 28,274 | 2,621 | 2,735 | 2,846 | 2,886 | ... |
| Norway (c) | 48,768 | 45,247 | 4,451 | 4,704 | 4,501 | 4,492 | 4,345 |
| Spain | 25,109 | 23,938 | 2,121 | 2,243 | 2,185 | 2,258 | ... |
| United Kingdom | 90,987 | 81,600 | 8,609 | 6,940 | 7,442 | 9,316 | 6,768 |
| Yugoslavia | 15,040 | 14,028 | 1,198 | 1,176 | 1,142 | ... | ... |
| Japan (a) | 112,292 | 111,185 | 11,227 | 11,644 | 11,600 | ... | ... |
| Australia (c) | 117,006 | 103,247 | 9,817 | 9,972 | 9,869 | ... | ... |
| Northern Rhodesia (c) | 29,736 | 28,616 | 2,464 | 2,604 | 2,576 | 2,632 | 2,632 |
| Total (f) | 2,243,501 | 2,262,980 | 202,860 | 213,678 | 208,033 | ... | ... |

(a) Partially electrolytic (b) As reported by the American Zinc Institute (c) Entirely electrolytic (d) Beginning 1954, both electrolytic and electrothermic (e) Reported as moving averages covering three months (f) The above accounting omits production in Russia, Czechoslovakia, Poland, Argentina and in the Belgian Congo.

WE BUY & SELL

- BERYL ORE
- ZIRCONIUM ORES
- TITANIUM ORES
- MICA
- TANTALITE
- COLUMBITE
- LITHIUM ORES
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SPOT LOTS
LONG-TERM CONTRACTS

J. E. DE SOUSA CO., INC.
217 BROADWAY
NEW YORK 7, N. Y.
WORTH 2-0491

SLAB ZINC

★ ELECTROLYTIC
Special High Grade
High Grade
Continuous Galvanizing Line Grades

★ FIRE RETORT
High Grade
Intermediate
Continuous Galvanizing Line Grades
Brass Special
Select
Prime Western

American Zinc sales company
Distributors for AMERICAN ZINC, LEAD & SMELTING COMPANY
Columbus, Ohio ▫ Chicago ▫ St. Louis ▫ New York ▫ Detroit ▫ Pittsburgh

### Dealers' Scrap Prices

Dealers' buying prices, f.o.b. New York or equivalent freight points, for wholesale quantities, in cents per lb.

| | |
|---|---|
| No. 1 copper wire | 43@43½ |
| Heavy copper & wire, mixed | 41@41½ |
| Light copper | 38½@39 |
| No. 1 composition | 33@33½ |
| Composition turnings | 31@31½ |
| Light brass | 19½@20½ |
| Yellow brass turnings, mix | 19½@20½ |
| Heavy yellow brass, mixed | 21½@22 |
| Auto radiators, unsweated | 25@25½ |
| Brass pipe, cut | 27@28 |
| Rod brass turnings, No. 1 | 26@26½ |
| Rod ends, brass | 27@27½ |
| New soft brass clips | 28@28½ |
| Cast aluminum, mixed | 16¾@17¼ |
| Aluminum crankcases | 16¾@17¼ |
| Aluminum clips, new soft | 19½@20 |
| Sheet aluminum, old clean | 17@17½ |
| Aluminum turnings, clean | 11½@12 |
| Zinc die cast, mixed | 3½ |
| Zinc die cast, new | 5½ |
| Old zinc | 6@6½ |
| New zinc clips | 8½@9 |
| Soft or hard lead | 12½@13 |
| Battery plates | 6½@6¾ |
| Babbitt mixed | 15½ |
| Linotype or stereotype | 14½@15 |
| Electrotype | 13@13½ |
| Solder joints close cut | 20@21 |
| Block tin pipe | 83@85 |
| Autobearing babbitt | 43½@44½ |
| Monel clips, new | 60 |
| Monel sheet, clean | 60 |
| Nickel, rod ends | 150 |
| Nickel, clippings | 150 |

### Tri-State Concentrates

Joplin, Mar. 13, 1956

| (a) *Blende* | *Per Ton* |
|---|---|
| Prime coarse (60% zinc) | $84.00 |
| Flotation, 60% zinc | $84.00 |

(a) Effective Jan. 9, 1956

*Galena*

Coarse and flotation, 80% lead....(a)$201.32

(a) Effective Jan. 16, 1956

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### Lead Average (Monterrey)

The net price realized by the American Smelting & Refining Co. on all of its sales of Mexican pig lead, including metal sold for consumption in Mexico, during the week ended March 3, 1956, was 14.14c (U.S.) per lb, f.o.b. refinery Monterrey, Mex.

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### Smelters' Aluminum Alloys

Delivered prices of smelters' aluminum ingot per pound, in lots of 10,000 lb. or more.

Piston alloy D132, 29½@31c; No. 12 alloy 29@29¾, No. 13 alloy, max. .30 copper, 30½@31½c.

Deoxidizing grades: No. 1, 29½@30c; No. 2, 28½@29c; No. 3, 28@28½c; No. 4, 27@27¾c.

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### Smelters' Copper Scrap Prices

Custom smelters' buying prices for scrap, carload lots, refinery:

No. 1 copper and wire, 46@46½c; No. 2 heavy copper, 44½@45c; light copper 42@42½c; refinery brass, 41@41½c.

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### Mexican Sulphur Output

Production of sulphur in Mexico in February was 56,814 metric tons.

## Iron, Steel, and Coke

*PIG IRON* – Per gross ton Valley furnaces: Bessemer, $59.50; basic, $58.50, and No. 2 foundry, $59.00.

*STEEL* – Per net ton, f.o.b. mill, Pittsburgh, billets and slabs, $68.50; Bars per 100 lb., $4.65; plates and structural shapes, $4.50@$4.60.

*COKE* – Per ton, Connellsville furnace, $14.125; foundry, $16.50.

*STEEL SCRAP* – Per gross ton, delivered Pittsburgh No. 1 heavy $48.50, No. 2 heavy $44.50; Cleveland, No. 1 heavy $49.50; No. 2 heavy, $44.

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### Brass and Bronze Ingot

85-5-5-5 (No. 115) 44c; 80-10-10 (No. 305) 47¾c; 88-10-2 (No. 215) 56¾c. Yellow, (No. 405) 34¾c; and upward. Manganese bronze (No. 421) 39¼c.

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### Japanese Copper Decrease

TOKYO (Reuters): Japanese trade sources say it is generally anticipated that output of electrolytic copper in February will show a decrease. Copper prices remain firm in view of this factor. Prices of lead are easy, due to increased stocks on the market, according to trade sources.

Output of copper, lead and zinc in January 1956 and December 1955, were as follows (all in metric tons):

| | Jan. | Dec. |
|---|---|---|
| Electrolytic copper | 10,100 | 10,770 |
| Electrolytic lead | 3,564 | 3,580 |
| Electrolytic zinc | 6,518 | 6,945 |
| Distilled zinc | 3,927 | 3,627 |

Gold
Lead
Bismuth
Arsenic

Silver
Zinc
Cadmium
Tellurium

**Antimonial Lead**

***UNITED STATES SMELTING REFINING AND MINING COMPANY***

57 WILLIAM STREET SALES OFFICE NEW YORK, N. Y.



**copper**
Electrolytic NEC* CCC*

**zinc**
99.99+% Electric*
High Grade Electrolytic

**lead**
Common Desilverized ILR*

**aluminum**
Pig • Ingot

NODULIZED MANGANESE ORE
FERROMANGANESE STANDARD GRADE
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66066 (REV.)